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PACKAGING FOR TOY DRUM COOKIES MADE FROM A FOLDING CUT OF CARDBOARD OR PAPER
JEWELRY BOX FOR SWEETHEART COOKIES AND CANDY FAIRY TALES AND CARTOON CHARACTERS
DECOUPAGE

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CLAIM	0360	PACKAGING FOR POWDER OR FLUIDS, FROM A FOLDING CARTON PROVIDED ON THE INSIDE
VERSION TITLE	0343	VERPACKUNG FÜR SCHÜTTGÄSTE ODER FLUIDE AUS EINER FALZKARTON MIT AUSNAHMEN DERSEITIGE

Description

The invention relates to packaging for powdery goods which is produced from a folded out made of cardboard or the like with side walls or side wall parts and bottom and top wall parts which are hinged to one another by folding lines.

Such packaging is known in various embodiments and is used in particular for powder detergents and cleaning agents as well as the tablet-shaped dishwashing detergents.

With such packaging, from which the product is removed a part at a time or with an actuating sprout on the lid, inside the folding box which forms the outside cover there is an additional inner lining made of cardboard, corrugated board, or the like, which imparts the necessary stability to the packaging and after some time forces a notch when the package is opened to make it facilitate simple removal of the opened bag.

The disadvantage of such packaging obviously is that along with the packaging proper, which is formed as a folded box, a second, additional cardboard, corrugated board, or other material layer is required, which naturally makes manufacture more expensive and complicated, and also leads to more materials use and weight increase. Further, the known packaging often cannot be emptied fully and completely, as product residue, in particular of powder detergents and cleaning agents, settles between the two material layers. If the known packaging is broken down and sent for used paper recycling, what is, which in the whole is desirable, often product residue which comes loose between the two original layers during this breakdown process contaminates the household or inadvertently enters the recycling process, thus blighting it.

It is the task of the invention, therefore, to improve such packaging so that with good stability and packability, it features simple manufacture and low materials usage, as well as good recyclability.

This task is contemplated in accordance with the invention with the packaging of the type described at the start, such that a top part which is hinged via a folding line to a side wall is movable at least in part along at least one first line which borders the folding line, and in the movable region at the free end it is supplied with an opening and closing flap, while the opposite side wall is provided with a recessed flap for insertion of the opening and closing flap.

With such packaging the disadvantages that arise in the known packaging are resolved in a simple and certain manner, since by dispensing with an additional outer frame and forming a resealable, self-supporting carton package from a single cardboard box, intermediate spaces in which merchant articles can usually be packed. At the same time, the packaging carton is drastically reduced, as the entire additional inner frame is omitted. The manufacture is simplified, as the previous inner frame need no longer be included in the folded box. And on the other hand, the break-down of the packaging after use and complete emptying is simplified, and waste paper generation is considerably reduced.

Prefably, the opposite side wall is provided with a partly adhered flap for the formation of the provided tool-in flap. In this way, in an extremely simple and economical way, a tool-in flap can be formed for insertion of the opening and closing flap. This can be implemented especially simply by first cutting a flap from the side wall, which is folded over and partly adhered to the opposite side wall, and then provided with a slit or the like for the formation of an insertion slot.

In an especially advantageous embodiment of the invention, the opening and closing flap is partly adhered to the opposite side wall on the outside, while the opposite side wall in the region of the slot and the folding line between the side wall and the partly adhered flap features perforations or the like for tearing off the adhered side wall region. In this way, during opening of the top part, a partial region of the upper edge of the opposite side wall, where the tool-in flap is located, is torn off and the

tock-in flap turned by the folding and refolding of the elongated flap is opened, and the insertion slot is formed.

Here it is further advantageously provided that the opposite side wall features tearable perforations only in the region of the adhesion and the folding line, and the opening and closing flap has a feature especially matching perforations. The result is that when the perforation and the top part are torn off, regions of the opposite side wall of the upper edge still remain and ensure stable holding of the packaging, even in the upper region. In addition, this facilitates the opening of the pack-in flap and the insertion of the opening and closing flap, in particular when the folding line and the perforation of the opening and closing flap are randomly arranged.

Further, the invention advantageously provides that the top line of the top part is formed on counteracting to split the underneath layer during tearing to form an overlap and contact surface between the exposed and fixed region of the top part. During tearing of the opened top part, the two split underneath layers can overlap and overlap one another, which in connection with the insertion of the opening and closing flap in the pack-in flap leads to very good protection of the packaging. The remaining split underneath layer, in combination with the wind, partially refolded flap of the pack-in flap assumes the function of an inner frame or collar, which is useful for a simple and as complete as possible reseal of the packaging.

13

In order to facilitate the tearing of the packaging and the insertion of the opening and closing flap in the pack-in flap, it is provided that the opening and closing flap features a cut which opens towards the outside.

It is further advantageously provided that part of the side walls is at least partly flattened to be melt-ply. This has the advantage, especially when the side wall regions are at least partly adhered to one

another, which the invention is an *advantageous embodiment*. Moreover provided for, that the side walls enhance the stability of the packaging, and make it possible to use a folding top with lesser wall strength. The strengthened side wall regions here assume the bearing function of the earlier additional *overhinged and unengaged hinged inserts*, and improve the self-supporting packaging properties.

To improve packaging stability, in a further advantageous embodiment it is provided that the folding out flange of the inside adhesive flap which is hinged to the free side wall, which can partly protrude out of the top hinged to the side wall, is adhered to the top part and the adjacent side wall regions. This creates a stability-enhancing connection between several side wall regions and the top part, as well as greater flap packaging.

In particular, the adhesion with the corner regions of the top part improves the rest of the flap region of the top part and ensures that during tearing of the expanded top part the material can also tear off and detangle.

The invention further provides in a further embodiment that the opening and closing flap features another folding flap, which facilitates insertion in the *nest-in flap*.

In a further advantageous embodiment, the invention also provides that one side wall features a protruding outer region decorated with transparent film to form a viewing window. This creates a easily identifiable viewing window, especially from the front side of the packaging, through which, depending on the embodiment, for example the packaging contents or filling level is visible.

The invention is explained in more detail below with reference to the drawing using examples, wherein:

Fig. 1 shows the folding top of the packaging with adhesive surfaces and perforation lines by dotted reference marks.

Fig. 2 shows a perspective representation of the packaging according to the invention in filling position.

Fig. 3 shows a perspective representation of the closed packaging according to the invention in usage position.

Fig. 4 shows a perspective representation of the closed packaging according to the invention in usage position.

The packaging according to the invention for packable goods to the drawing is generally designated by 1, and is formed from a cardboard folding carton which is generally designated by 2.

This folding carton 2 features a side wall 4, a bottom wall part 5, a side wall 6, and a top part 7 which are initially hinged to one another via folding lines 3.

Via the folding lines 8, the side wall parts 4a, 4b, 6a, and 6b, and the side wall parts 4c, 5b, 6b, and 6c are hinged respectively to the side wall 4, and the bottom and top wall parts 5 and 7 respectively. Here when assembled the side wall parts 4a to 7b form one side wall and the side wall parts 4b to 7b form an opposite side wall, which is shown in Figures 3 and 4 in multiply reflected position, and designated by 17.

An opening and closure flap 9 is hinged to the top part 7 of the free end via a folding line 3a, and in the represented containment situation a cut which tapers towards the inside.

A flap 11 is hinged to the opposite side wall 4 likewise on the outside via a folding and perforation line 10. It is made to overlap with the side wall 4 by folding along the folding line 10, and is adhesed at least in the region 12. The side wall further features an opening perforation 13 for tearing off the side wall region 14.

Conversely the folding out 17 features on the outside the adhering flaps 15a and 15b which are hinged to the free side wall 4, and in the regions 16 are punched out of the flap 11 which is hinged on the

comprise in the side wall 4, and which in the region 16 serve to adhere with the top part 7 and in their remaining region serve to adhere with the innermost layer of the multi-ply side wall regions 4a to 4c to 4d.

In the presented embodiment, the top part 7 comprises four lines 18 each bordering the folding line 3, which in the presented embodiment are located on the innermost region 18a and 18b. By tearing off of the top part 7 by means of the opening and closing flap 9 which is longer w.r.t. the top flap 19 is opened, which is shown in figure 3 it is closed when used in figure 4 in opened state, and is upwardly protruding above the folding line 3.

In the presented embodiment, the folding out 2 further comprises in the region of the opening and closing flap 9 additional perforations 10, 20b which in certain sites coincide in places with the perforation 10 of the opposite side wall part 4. The four lines 18 about them in the region of the top part 7.

From the folding out 2, the packaging 1 can be produced in accordance with fig. 2 in that the flap 11 initially coated with an adhesive layer 12 is folded 130° and adhered in places w.r.t. the side wall 4. Then along all the folding lines 3, the wall or wall parts 4, 5, 6, and 7 are folded in, and at the same time the opening and closing flap 9 at least in places (region 9a) is adhered in the opposite side wall 4 on the outside. At the same time the bonding flaps 13a and 13b, glued to the side wall 4 on the outside, are also adhered to the adjacent side wall regions 4a, 7a, and the punched-out regions 16 in the top part 7.

In this way a sturdy yet is obtained which can be folded, stored, and transported flat. For filling, the top or strengthened up the side wall regions 4a to 7a are preferably closed to a labyrinth closure, and advantageously at least partly adhered to one another. The packaging is placed with the thus formed side wall 17 down and the opened side wall regions 4b to 7b top and then filled

Then the side wall regions 48 to 50 likewise are preferably closed in a labyrinth closure and at least partly adhesed to one another. For transport and use, the packaging is closed 96% in the usage position.

For opening, the free end of the opening and closing flap 9 is moved and pulled to an upward and backward and pulled off along the perforations 20a. Here the perforations 13 and 15 of the opposite side wall 4 in the region of the adhesion with the opening and closing flap 9 is first upward, and the side wall region 14 off. The lower flaps adhered to the top opening and closing flap 9 are strengthened it. In this way, the web in flap 25 formed from the folded flap 11 and suggested in Fig. 4 b, released or opened.

During opening of the opening and closing flap 9, the top part 7 then tears along the free lines 18, which are designed as the countersinking 18a, 18b, and connect to the perforations 10a, 20b. Here the outside layer of the top part 7 is up because of the countersinking 18a, 18b, so that the overlap and contact surfaces 21a and 21b are formed. When the top 19 freed by tearing from the top part 7 is pulled back, the overlap and contact surfaces 21a and 21b of the opened and freed regions of the top part 7 again lie tightly on one another. The opening and closing flap 9 is inserted in the back-in flap 25 formed by the tearing, and again forms a good and certain closure of the packaging. Here an advantageously provided additional folding line 22 above in the middle of the opening and closing flap 9 facilitates insertion in the back-in flap 25.

A protected opening 27 in the opposite side wall 4 backed with competent film 24 allows inspection of the packaging content and/or the fill status of the packaging.

Generally, the invention is not limited to the presented exemplary embodiments. Possible modifications of the invention are possible without abandoning the basic notion. Thus for example, the top part 7 can also be tearable along a tear line 18 which at least in places coincides with the folding

hinge 8 abutting the side wall parts 2a, 2b, and the opening and closing flap 9 can extend over the entire length of the top part 7 and the opposite side wall part 4. The same applies to the notches 25 and so forth.

Claims

1. Packaging for powdered goods, comprising a folding carton made of cardboard or the like with side walls or side wall parts and bottom and top parts respectively hinged to one another via folding lines, characterized in that the top part (7) hinged via a folding line (3) to one side wall (6) is tearable at least in places along at least one line (18) adjacent to the folding line (3), and that in the tearable region in the line (18) is provided with an opening and closing flap (9) hinged via a folding line (36), while the opposite side wall part (4) is provided with a tuck-in flap (20) for insertion of the opening and closing flap (9);
2. Packaging in accordance with claim 1, characterized in that the opposite side wall (4) is provided with a partly adhered flap (11) at the top for formation of the tuck-in flap (20);
3. Packaging in accordance with claims 1 or 2, characterized in that the opening and closing flap (9) is adhered or glued in part with the opposite side wall (4) on the outside, and the opposite side wall (4) in the region of the adhesion (12) and along the folding line (3) features perforation, or the like, between the side wall (4) and the partly adhered flap (11) for tearing off the adhered side wall region (14);
4. Packaging in accordance with claim 3, characterized in that the opposite side wall (4) only a partial region of the adhesion (12) and the folding line (3) features tearable perforation (16, 18), and the opening and closing flap (9) features perforation (26a, 26b) which opens in specially with wire;
5. Packaging in accordance with one of the previous claims, characterized in that the line (18) of the top part (7) is formed in countersinking (18a, 18b) for splitting the cardboard layer during tearing.

to form an innerlay and content surface (13a, 13b) between the exposed and fixed region (12) of the container.

6. Packaging in accordance with one of the previous claims, characterized in that the opening and closing flap (3) features a notched top flap towards the outside.
7. Packaging in accordance with one of the previous claims, characterized in that a part of the side wall is formed as a fold flap at least in parts (3a to 3c, 3b to 3d).
8. Packaging in accordance with claim 7, characterized in that the mouthpiece region of the side walls, from the side wall parts (3a to 3c, 3b to 3d) at least in part are adhered to one another.
9. Packaging in accordance with one of the previous claims, characterized in that the fold flap (3) features a return flap (13a, 13b) hinged on the outside in the free side wall (3), which can partially penetrate into the flap (31) which is hinged to the side wall (3) on the outside, for adhering with the flap part (3) and the adjacent side wall regions (3a to 3c, 3b to 3d).
10. Packaging in accordance with one of the previous claims, characterized in that the opening and closing flap (3) features an additional folding line (22).
11. Packaging in accordance with one of the previous claims, characterized in that a side wall features a punch hole (23) backed by a transparent film (24) to form a viewing window.



